

Product datasheet for SC111717

B3GALNT1 (NM_003781) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	B3GALNT1 (NM_003781) Human Untagged Clone
Tag:	Tag Free
Symbol:	B3GALNT1
Synonyms:	B3GALT3; beta3Gal-T3; galt3; Gb4Cer; GLCT3; GLOB; P; P1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC111717 sequence for NM_003781 edited (data generated by NextGen Sequencing)

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ATGGCCTCGGCTCTCTGGACTGTCCTTCCGAGTAGGATGTCACTGAGATCCCTCAATGG
AGCCTCCTGCTGCTGTCCTGACTCCTGAGTTTCTTTGTGATGTGGTACCTCAGCCTTCCCCAC
TACAATGTGATAGAACGCGTGAACCTGGATGTAATCTATGAGTATGAGCCGATTTACAGA
CAAGACTTTCACCTTCACACTTCGAGAGCATTCAAAGCTCTCATCAAAATCCATTTCTG
GTCATTCTGGTGACCTCCACCTTCAGATGTGAAAGCCAGGCAGGCCATTAGAGTTACT
TGGGGTGAAAAAAGTCTTGGTGGGGATATGAGGTTCTTACATTTTTCTATTAGGCCAA
GAGGCTGAAAAGGAAGACAAAATGTTGGCATTGTCCTTAGAGGATGAACACCTTCTTTAT
GGTGACATAATCCGACAAGATTTTTAGACACATATAATAACCTGACCTGAAAACCATT
ATGGCATTGAGTGGGTAAGTGAATTTGCCCCAATGCCAAGTACGTAATGAAGACAGAC
ACTGATGTTTTTCATCAATACTGGCAATTTAGTGAAGTATCTTTAAACCTAAACCACTCA
GAGAAGTTTTTTCAGGTTATCCTCTAATTGATAATTATTCCTATAGAGGATTTTACCAA
AAAACCCATATTTCTTACCAGGAGTATCCTTTCAAGGTGTTCCCTCCATACTGCAGTGGG
TTGGGTTATATAATGTCCAGAGATTTGGTGCCAAGGATCTATGAAATGATGGGTCACGTA
AAACCCATCAAGTTTGAAGATGTTTATGTCGGGATCTGTTTGAATTTATTTAAAGTGAAC
ATTCATATCCAGAAGACACAAAATCTTTCTTTCTATATAGAATCCATTTGGATGCTGT
CAACTGAGACGTGTGATTGCAGCCCATGGCTTTTCTTCCAAGGAGATCATCACTTTTTGG
CAGGTCATGCTAAGGAACACCACATGCCATTATTA

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Clone variation with respect to NM_003781.3



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003781 unedited
 ATTTGTATACGACTCCTATAGGCCGGCCCGCAATTCGCACGAGGCTTTAATTTTCATCTGG
 AATTCCACAGTTTTCTTAGCTCCCTGGACCCGGTTGACCTGTTGGCTCTTCCCGCTGGCT
 GCTCTATCACGTGGTGTCTCCGACTACTACCCCGAGTGAAAGAACCTTCGGCTCGCG
 TGCTTCTGAGCTGCTGTGGATGGCTCGGCTCTCTGGACTGTCTTCCGAGTAGGATGTC
 ACTGAGATCCCTCAAATGGAGCCTCCTGCTGTCTCACTCCTGAGTTTCTTTGTGATGTG
 GTACCTCAGCCTTCCCCACTACAATGTGATAGAACGCGTGAACCTGGATGACTTCTATGA
 GTATGAGCCGATTTACAGACAAGACTTTCACTTACACTTCGAGAGCATTCAAACCTGCTC
 TCATCAAATCCATTTCTGGTCATTCTGGTGACCTCCCACCCTTCAGATGTGAAAGCCAG
 GCAGGCCATTAGAGTTACTTGGGGTGAAAAAAGTCTTGGTGGGGATATGAGGTTCTTAC
 ATTTTTCTTATTANGCCAAGAGGCTGAAAAGGAAGACAAAATGTTGGCATTGTCCTTAGA
 GGTGAACACCTTCTTTATGGTGACATAATCCGACAAGATTTTTTAGACACATATAATAA
 CCTGACCTTGAAAACCATATGGCATTGAGGTGGGTAACCTGAGTNTGCCCATGCCAAG
 TACGTAATGAAGACAGACTGATGTTTTATCAATACTGGNCATTTAGTGAAGTATCTT
 TTAACCTAAACCACTCAGAGAAGTTTTTACAGGTTATCTCTATTGNATATTATCTCT
 ATAGAGGATTTTCCAAAAACCCATATTTCTACCAGNAGTATCTTTCAGGGTGTCCCTCTA
 CTGCAGTGGGTAG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003781 unedited
 TTACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTTTTATAAAAAGGAAATACCCAAACGGGGGCATTTATTGGCATTATCA
 GTATTACATACTGGACATAACTGAATGGGCTGTACTTTTATACTGGCAGTGAATAG
 GTTTGTTTACACCAACATTTCCACAACACGTGAGTAATGCACTAGGCTATGACATTA
 ACGGCTAAAACATCATGAGGCAATAAATTTCTGCTCCATTATAATTTTATGGGACCACT
 ATTGTATATGTCATTATGCAACAATAACTGTAATCTTCTGCAAAACAGTCAAATTTAA
 CCATGCCACAAAAATAACTACCACCATTTGTCTTAAAAACGTGACTCCTATATGGATGG
 AAATTAACAAGGGCATAAATCGATTCTATAAAAATTTTCATTTAATTGATTTTATTATAA
 CTGGATTAGGTCTGAGCCCTGGGAAACAGACATCACCTTGTATACAAAATCACACATTA
 TAGTTTTAACTGAAGTTGTTTTTATATAGGACAATCATAAATATGAGTATTACAAGAGC
 TGACTACATACTTTAAAGTTTATATTTCTGACAAAGGATATGACCCTTTTCCATCCTGT
 AATTAAGAAAGAAAAGACCACTTGCCCTATATAAATCTAAAAGAAAACGATAACACCC
 AGAACAGGGGGCAGGGAGTGTCCCTTTGACCTACTTTTACAGGTCCAAAAATGAAATT
 TACCCCGTCTTTGAAAAATTTCTTCTATAAAAAGCCAAAATTAACGGGATTGACTTA
 ACTATTAAGTTTCATCGTGATAGAAAATCTTAACAGCGCCGTTTAAATTGT

Restriction Sites:

NotI-NotI

ACCN:

NM_003781

Insert Size:

3000 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_003781.2 , NP_003772.1
RefSeq Size:	3210 bp
RefSeq ORF:	996 bp
Locus ID:	8706
UniProt ID:	O75752
Cytogenetics:	3q26.1
Domains:	Galactosyl_T
Protein Families:	Transmembrane
Protein Pathways:	Glycosphingolipid biosynthesis - globo series, Metabolic pathways
Gene Summary:	<p>This gene is a member of the beta-1,3-galactosyltransferase (beta3GalT) gene family. This family encodes type II membrane-bound glycoproteins with diverse enzymatic functions using different donor substrates (UDP-galactose and UDP-N-acetylglucosamine) and different acceptor sugars (N-acetylglucosamine, galactose, N-acetylgalactosamine). The beta3GalT genes are distantly related to the Drosophila Brainiac gene and have the protein coding sequence contained in a single exon. The beta3GalT proteins also contain conserved sequences not found in the beta4GalT or alpha3GalT proteins. The carbohydrate chains synthesized by these enzymes are designated as type 1, whereas beta4GalT enzymes synthesize type 2 carbohydrate chains. The ratio of type 1:type 2 chains changes during embryogenesis. By sequence similarity, the beta3GalT genes fall into at least two groups: beta3GalT4 and 4 other beta3GalT genes (beta3GalT1-3, beta3GalT5). The encoded protein of this gene does not use N-acetylglucosamine as an acceptor sugar at all. [provided by RefSeq, Mar 2017]</p> <p>Transcript Variant: This variant (1) encodes isoform b. Variants 1-5 and 8-39 all encode the same isoform (b).</p>